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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/847,765

05/01/2001

Greg Carlson

10003924-1

7792

7590

11/01/2004

AGILENT TECHNOLOGIES
Legal Department, 51U-PD
Intellectual Property Administration
P.O. Box 58043
Santa Clara, CA 95052-8043

EXAMINER

PHAM, BRENDA H

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,765

Applicant(s)

CARLSON, GREG

Examiner

Brenda Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/1/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toh (US 987,011) in view of Antonucci et al (US 6,584,307).

Claim 1, Toh discloses a method for routing messages in an ad hoc network having a plurality of nodes, where each node has a location, where at least one node can change its location, the method comprising: receiving a message; determining whether the received message has been encountered recently; when the received message has been encountered recently, discarding the message; when the received message has not been encountered recently, determining whether the current node is the destination of the message; when the current node is the destination of the message, processing the message; and when the current node is not the destination of the message, selectively forwarding the message to another node.

{Referring to FIG. 5a, once the BQ packet 18 has been broadcast by the source node 20, all neighbouring nodes 01, 02, 03, IS1 that receive the packet 18 check if they have previously processed the BQ packet 18. If affirmative, the BQ

packet 18 is discarded, otherwise the neighbouring node 01, 02, 03, IS1 checks if it is the destination node 24. If it is not the destination node 24, the neighbouring node 01, 02, 03, IS1 appends its mobile host address 26 at the intermediate node identification (ID) field of the BQ packet 18 and broadcasts it to its neighbours (if it has any), column 8, lines 23-35}}.

Toh does not teach forwarding the message by employs the geographic position data of the current node.

{Antonucci et al in the same field of endeavor, teach that “geographic information may indicate location of a switch or service provider handling the abbreviated number call. The geographic information may be derived from Global Positioning System (GPS) information, or triangulated information from a plurality of wireless service towers to estimate position of a wireless caller. Another type of geographic information may relate to send a message or any other geographic information appropriate to estimate the locus of the caller placing the abbreviated number of call.” (column 13, lines 11-22)}

It would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the step of forwarding the message to another node in an intelligent manner that employs the geographic position data of the current node, such as that taught by Antonucci, in Toh to estimate position of a wireless caller.

Claim 2, as explained in the rejection statement of claim 1, Toh in view of Antonucci et al disclose all claim limitations recited in claim 1 (parent claim). Although

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Toh in view of Antonucci et al does not teach the steps of determining whether a message has been received; when a message has not been received, continues to wait for the arrival of a message, it well known and would have been obvious to implement these step on Toh in view of Antonucci et al to allow the system to wait for arrival of message.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the claim limitations of claim 2 in Toh in view of Antonucci et al.

Allowable Subject Matter

4. Claims 12-20 are allowed.
5. Claims 3-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record does not the method of claim 1 wherein the step of determining whether the received message has been encountered recently includes: determining whether the destination field of the received message matches with the destination field of previously received messages; determining whether the source field of the received message matches with the source field of previously received messages; and determining whether the message identifier field of the received

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message matches with the message identifier field of previously received messages recited in claim 3.

The prior art further fails to teach the method of claim 1 wherein the step of determining whether the received message has been encountered recently includes storing the destination field, the source field and message identifier field of the received message for use in future processing of step (b) recited in claim 4.

The prior art further fails to teach the method of claim 1 wherein the step of when the received message has not been encountered recently, determining whether the current node is the destination of the message includes comparing a unique address field in the received message with an address of the current node recited in claim 5.

The prior art further fails to teach the method of claim 1 wherein the step of when the current node is not the destination of the message, selectively forwarding the message to another node in an intelligent manner that employs the geographic position data of the current node includes: determining whether the current node is closer in proximity to the destination node than the last node is from the destination node; when the current node is closer in proximity to the destination node than the last node is close to the destination node, then updating the message with the location of the current node; and forwarding the updated message to a next node in the network recited in claim 6.

The prior art made of record does not teach a routing system comprising: a position determination module for determining the position of the current node; a communication mechanism for communicating messages with other nodes; a

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geographic position dependent routing mechanism coupled to the position determination module and communication mechanism for receiving messages, the position of the current node, and based thereon for one of transmitting the message and discarding the message recites in independent claim 12.

Conclusion

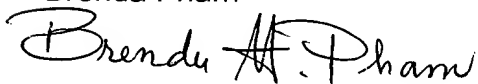
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

October 19, 2004

Brenda Pham

A handwritten signature in cursive script that reads "Brenda A. Pham". The signature is written in dark ink and is positioned below the printed name "Brenda Pham".